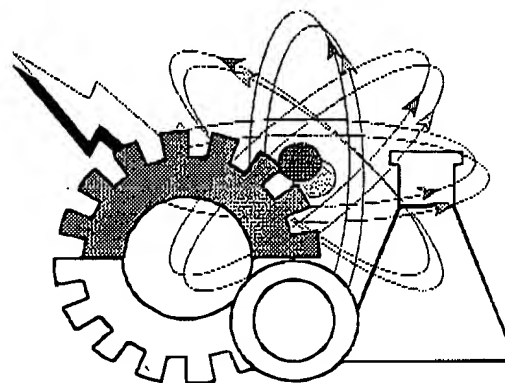

*** TX REPORT ***

TRANSMISSION OK

TX/RX NO 1699
CONNECTION TEL 918054998011
SUBADDRESS
CONNECTION ID
ST. TIME 01/03 18:29
USAGE T 01'06
PGS. 3
RESULT OK

Joseph Woitach
Patent Examiner (US-PTO)
Phone: 703-305-3732
Fax: 703-308-8724



Fax

To: Robert B. Winter

Fax: (805)499-8011

Pages: 3 (including cover)

Phone: (805)447-2425

Date: January 3, 2001

Re: Application 08/974,186

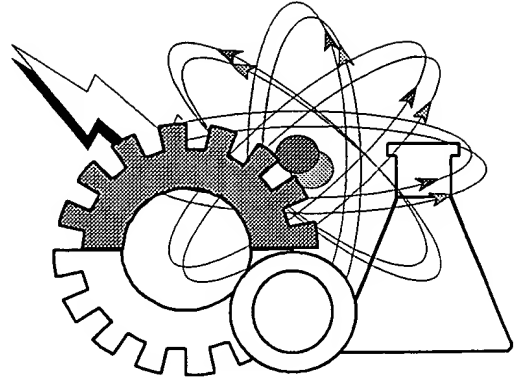
☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

• Comments:

Attached is a copy of the proposed amendments. The new claims were added to more completely encompass the invention.

Sincerely,

Joseph Woitach
Patent Examiner (US-PTO)
Phone: 703-305-3732
Fax: 703-308-8724



Fax

To: Robert B. Winter

Fax: (805)499-8011

Pages: 3 (including cover)

Phone: (805)447-2425

Date: January 3, 2001

Re: Application 08/974,186

☐ **Urgent** ☒ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

● **Comments:**

Attached is a copy of the proposed amendments. The new claims were added to more completely encompass the invention.

Sincerely,

Joseph T. Woitach

Proposed amendments

49. A method of increasing levels of osteoprogenin in a mammal comprising administering to the mammal a nucleic acid which encodes osteoprogenin, wherein the expression of osteoprogenin results in an increase in the level of osteoprogenin and wherein said increase of osteoprogenin in the mammal results in increased bone size or increased bone density.

(canceled claim 50)

51. The method of claim 49 wherein the mammal is a human.

52. The method of claim 51 wherein the nucleic acid encodes osteoprogenin comprising the amino acid sequences as shown in Figure 9B, SEQ ID NO: 5.

53. The method of claim 51 wherein the nucleic acid encodes osteoprogenin comprising a carboxy-terminal truncation of the amino acid sequence as shown in Figure 9B, SEQ ID NO: 5.

54. The method of claim 51 wherein the nucleic acid encodes osteoprogenin comprising a deletion of the amino acid sequence as shown in Figure 9B, SEQ ID NO: 5 wherein the deletion comprises removal of the amino acids from the carboxy-terminal or the amino-terminal.

Add claims:

55. The method of claim 49 wherein said increase of osteoprogenin in the mammal results in increased bone size.

56. The method of claim 49 wherein said increase of osteoprogenin in the mammal results in increased bone density.

57. The method of claim 49 wherein said increase of osteoprogenin in the mammal results in increased bone size and bone density.

58. The method of claim 53 wherein the carboxy-terminal truncation comprises amino acids 180-401. ^{part or all}
/l

59. The method of claim 53 wherein the carboxy-terminal truncation comprises a truncation which conserves at least amino acids 1-180.

60. The method of claim 54 wherein the deletion of the amino acid comprises deletion of the amino terminal leader sequence.

61. The method of claim 54 wherein the deletion of the amino acid comprises amino acids 1-

21.

62. The method of claim 54 wherein the deletion of the amino acid comprises a deletion which conserves at least amino acids 22-180.

(support for claims 57-61 is on page 15)

Claims 52-62 as written are directed to the method used in humans, add claims for protection to other mammals.

63. The method of claim 49 wherein the nucleic acid encodes osteoprogenin comprising the amino acid sequences as shown in Figure 9B, SEQ ID NO: 5.

64. The method of claim 49 wherein the nucleic acid encodes osteoprogenin comprising a carboxy-terminal truncation of the amino acid sequence as shown in Figure 9B, SEQ ID NO: 5.

65. The method of claim 49 wherein the nucleic acid encodes osteoprogenin comprising a deletion of the amino acid sequence as shown in Figure 9B, SEQ ID NO: 5.

66. The method of claim 64 wherein the carboxy-terminal truncation comprises amino acids 180-401.

66. The method of claim 64 wherein the carboxy-terminal truncation comprises a truncation which conserves at least amino acids 1-180.

67. The method of claim 65 wherein the deletion of the amino acid comprises a deletion of the amino terminal leader sequence.

68. The method of claim 65 wherein the deletion of the amino acid comprises amino acids 1-21.

69. The method of claim 65 wherein the deletion of the amino acid comprises a deletion which conserves at least amino acids 22-180.

70. A method of increasing bone size or increasing bone density in a mammal comprising administering to a mammal a nucleic acid which encodes osteoprogenin, wherein said administration results in increased levels of osteoprogenin in said mammal and said increased level of osteoprogenin results in increased bone size or increased bone density.

71. The method of claim 70 wherein the method increases bone density.

72. The method of claim 70 wherein the method increases bone size.

73. The method of claim 70 wherein the method increases bone density and bone size.